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May 2, 2008

Mr. John Heinrich
Bureau of Air Management
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707-7921

Submitted electronically: Jon.Heinrich@Wisconsin.gov

Re: Wisconsin Power and Light Co. comments on Natural Resources Board Order AM-32-05, Proposed Revisions to NR446 relating to the establishment of provisions for coal-fired electric generating units in Wisconsin to limit mercury air emissions.

Dear Mr. Heinrich:

The following comments are submitted on behalf of Wisconsin Power and Light Co. (WPL) regarding the Wisconsin Department of Natural Resources' (WDNR) proposed revisions to NR446 that were published for public review on March 5, 2008. In addition, WPL further supports the comments submitted by the Wisconsin Utilities Association (WUA).

Our company is continuing to evaluate the impacts of the proposed rulemaking on emissions compliance plans and installation of air pollution controls. However, WPL respectfully submits the following recommended revisions for WDNR consideration, as requested by the May 5 public comment deadline:

Ensure Consistency with Federal Mercury Regulation - Recent events have led to uncertainty regarding the nature of Federal mercury regulation for existing coal-fired electric generating units (EGUs). However, given the significant national support to resolve this issue, it can be reasonably expected that EPA actions will be expedited to clarify the appropriate requirements. WPL's customers will be best served by a state policy that ultimately allows for alignment with Federal mercury regulations and this is required under Wisconsin statutes (WI Stats. 285.27(2)). WPL requests that Wisconsin's rules

recognize this statutory requirement by including provisions that support transition to Federal mercury regulations when adopted. Specifically, WPL believes maintaining identical language to that already included in the current rule under NR446.029 would sufficiently address this transition. The proposed rule at NR446.19 should also include a requirement to conduct an evaluation of EPA federal mercury regulations when proposed in order to assess compatibility with the Wisconsin mercury rule.

Allow for Unrestricted Banking of Early Reductions - WPL also believes the rule proposal could do much more to encourage early action by providing full credit for banking. This proposal restricts use of early reduction credits (ERCs) to only "5% of the annual allowed emission total", which is too restrictive. Banking provisions support technology development and early emissions reductions, as well as, provide for compliance flexibility and reduced costs. With this in mind, imagine a scenario where a WPL unit with mercury controls, i.e., a low mercury emitting unit, has a planned maintenance outage or an extended outage for installing additional pollution control equipment. This unit, critical to a fleet mercury compliance requirement is no longer able to support the rest of the fleet in achieving its mercury compliance limit, however, a WPL bank of mercury credits could be used to bridge this period when a low mercury emitter is out of service. Similar to emissions of sulfur dioxide (SO_2) and nitrogen oxides (NO_x), there is significant benefit to allowing banking of early reductions for mercury emissions in order to reduce its cumulative impact on the environment. The ability to use 100% of banked mercury ERCs should be allowed for both small and large EGUs and all compliance options (mercury only or multi-emissions approach).

Expand Electric Reliability Waiver - Even with the multi-emissions option, this rule accelerates the needed air pollution controls on compliance timeframes that are already very difficult to achieve. This is a disadvantage not only to Wisconsin utilities but moreover, our customers in what are already economically challenging times. Installation and optimization of the needed advanced air pollution control technologies will require three to four years. WPL is encouraged that the department is willing to consider a longer timeline to achieve these outcomes through an "electric reliability waiver" under the multi-pollutant option. However, this request must be made within 24-months of the rule's effective date and no extensions are allowed beyond January 1, 2017. WPL strongly recommends that this extension request must also be made available for the 90% mercury-only compliance option. In addition, WPL believes that the timeframe during which a utility may request an electric reliability waiver should not be restricted and that an extension request should be allowed at anytime as long as sufficient justification is available.

90% Utility Mercury Reduction May Not Be Attainable - WPL's review of the technology remains unable to conclude that 90% mercury control will be possible. The proposed rule's evaluation of technology developments by August 31, 2013 is necessary, because mercury control feasibility is both power plant and boiler-specific, and is dependant on the type of fuels burned. The averaging provisions in the rule provide insufficient compliance

flexibility when considering that all of WPL units burn subbituminous coal, and, by the WDNR's own admission, this type of fuel is the hardest to control for mercury[1]. In addition, the 90% limits established have not accounted for additional mercury that will be emitted from EGUs from air pollution control additives, such as naturally occurring mercury in lime and limestone that is injected for flue gas desulphurization (FGD) and water used in these FGD devices that consequently becomes re-emitted. WPL's engineering consultants indicate that approximately 30% of mercury emissions can be contributed to non-fuel sources. While the WDNR has approached mercury control in a multi-pollutant manner, the ability to make dramatic reductions in SO_2 will actually increase the burden for mercury emission control. WPL recommends that mercury reductions requirements be set to provide for a reasonable compliance margin given the uncertainties of control technology performance and to account for non-fuel mercury contribution. WPL will try to achieve 90% mercury reduction, but believes it is only realistic to propose such limits when there is long-term actual operational experience to support this level of stringency.

Increase Mercury Output-Based Emissions Limitation - The output-based mercury emissions standard in the proposed rule revision requires compliance at a rate of 0.0080 lbs/GWh. Documentation obtained from WDNR to support the calculation of this output-based limit references that fuel mercury content assumptions were taken from the ICR 1999 database. Specifically, the fuel mercury content assumption used to derive the limit is 5.77 lbs/Tbtu for subbituminous coal and 8.65 lbs/Tbtu for bituminous coal. Under the current NR446 rule, WPL conducted comprehensive fuel sampling and analysis of mercury content for a one year period (Dec. 2004 to Nov. 2005). This data was provided to the WDNR as part of the historical baseline determination requirement. Review of WPL's data indicates that the subbituminous mercury content is at least 20% to 30% higher than the values used by the WDNR in the revised rule development. Furthermore, WPL's data is based on the mercury content "as received" taking into account moisture content versus ICR data that was analyzed on a dry basis; this can account for a 20% to 30% difference in content depending on the moisture in the coal. Therefore, WPL believes that the 0.0080 lb/GWh mercury emissions standard is too restrictive and not appropriately derived from the ICR data as this does not represent fuels as actually burned. WDNR should re-evaluate this standard given real fuel mercury sampling data that has already been provided to the Department by Wisconsin utilities.

Allow for Election to Measure Percent Mercury Reductions from Existing NR446 Baseline – The rule establishes two methods for determining the mercury baseline for a facility – the existing baseline developed using actual fuel consumption data and the proposed recurring annual baseline. Starting in 2015, the proposed rule revision goes to a current year mercury baseline determination procedure[2] that requires significant fuel sampling and

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[1] WDNR's Publication AM-383-2007 - Preliminary Mercury Finding Pursuant to Section 285.27(2)(b), Wisconsin Statutes - March 2008, Pages 18-19.

[2] The proposed rule includes this requirement under NR446.17. WPL further notes that the annual compliance report requirement in the proposed rule is listed as beginning in March 1, 2015 for the previous

analysis for establishing annual compliance with a reduction based on fuel content. Moreover, WPL has installed continuous mercury emission monitors (CMMs) on its coal-fired units and is in the process of certifying these CMMs. How does the proposed fuel sampling, recurring annual baseline fit with a CMMs-based emissions reading? WPL believes that the mercury baseline established under the existing NR446 rule in January 2007 is sufficient as a basis for a fuel-derived baseline, although it does not consider the additional non-fuel mercury contribution, as previously discussed, and it makes measuring a reduction percentage more simplified when considering the use of CMMs. WDNR has provided no rationale to justify the additional complexity and administrative burden in support of a current year baseline. WPL recommends that the proposed rule be revised to include the option of electing to use the existing baseline requirement under NR446.06.

Add Option for Percent Reduction Limits under Multi-Emissions Alternative - WPL believes that there is opportunity to increase the compliance flexibility for the multi-emissions alternative under NR446.14. In addition to having NO_x and SO_2 limits in terms of lbs/mmBtu of heat input, WPL requests that similar to the mercury limits, there be added the option to comply with a percent reduction level (instead of the rate-based standard). WPL believes that these percent reduction levels should be set at 90%[3] for both NO_x and SO_2, as measured from uncontrolled levels. Utilities that have spent considerable amounts of time developing multi-pollutant emission control plans should not be penalized and forced to take a short-range path that does not consider long-range planning. A percent reduction for NO_x and SO_2 reduces such a penalty.

Clarify Definition of "New" versus "Existing" Unit - The proposed rule revision is unclear in defining a "new" versus an "existing" unit for purposes of NR446 compliance. WPL recommends that the rule language clarify that any unit for which a construction permit application was submitted or should have been submitted to the WDNR by the promulgation date of the rule[4] be considered an "existing" unit. Furthermore, the rule should also state that the applicable emission standard for new coal-fired units with a submitted application shall be equivalent to the standard that is applicable to new units under federal regulations, such as Maximum Available Control Technology (MACT).

Eliminate Lowest Achievable Emission Rate (LAER) Requirement - The proposed rule revision under NR446.11 would require LAER for new coal-fired EGUs. WPL believes that the LAER requirement creates additional and unnecessary administrative complexity, because mercury compliance requirements are currently in-place for new coal-fired EGUs under the Clean Air Act (CAA). Specifically, new coal-fired EGUs are required by CAA Section 112(g)(2) to obtain permits with mercury standards established on a case-by-case

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year. This date appears to be in error and should be listed as March 1, 2016, given that the proposed rules second phase mercury and multi-emissions limits begin in 2015.

[3] Compliance demonstration with a percentage requirement should provide credit for emissions reductions achieved through combustion improvements and in consideration cumulative reductions including pre-combustion controls and other technologies, such as Selective Non-Catalytic Reduction (SNCR) or Rich Reagent Injection (RRI).

[4] Similar language is already in NR 446 and would continue to be included in 446.03(2)(c).

basis. These case-by-case standards must be equivalent to the maximum achievable emissions controls achieved by the best-controlled similar source. Therefore, WPL recommends that the LAER requirement be removed and instead that the Department require new units to meet the Federal mercury control requirement for new coal-fired EGUs.

90% Control Requirement for New Emissions Units - In addition to a technology requirement for the control of mercury, the proposed rule requires new coal-fired EGUs to control mercury emissions by at least 90%. WPL requests that the proposed rule include provisions for inclusion of new unit emission reductions into mercury control averaging that has been proposed to be an alternative method of compliance for existing EGUs. By allowing new units to be included in this compliance methodology, compliance monitoring across a fleet of coal-fired EGUs will be simplified since new unit contribution to overall mercury emissions will not have to be separated from those of existing EGUs.

90% Control Requirement for EGUs Vented Through a Common Stack - While fuel characteristics and heat input can be readily determined on an individual EGU basis, this is not the case with respect to emission rates when a common stack is utilized to vent emissions of multiple operating EGUs. Thus, WPL suggests that the option of using combined fuel information and operational data of EGUs that are vented by way of a common stack be allowed for comparison to the total stack emission data as reported on the CEMs when fleet-wide averaging has not been elected as a compliance approach. Furthermore, WPL suggests that new units that have emissions vented through a common stack with existing units be addressed in the same fashion.

Allow Continuous Mercury Emission Monitors (CMMs) for Compliance Prior to 2014 - The proposed rule revision indicates that the Department will promulgate CMMs requirements by December 31, 2013. Therefore, prior to this date, the use of CMMs would need approval as an alternative compliance approach. WPL requests that the option to use CMMs under NR446.18 be directly allowed prior to 2014, without requesting this as an alternative approach. See also the previous discussion on how the use of CMMs supports the measurement of mercury reductions using the existing baseline.

Eliminate Fuel Sampling/Analysis when CMM used for Output-Based Standard - For EGUs that have a CMM, sufficient data will exist to demonstrate compliance with the output-based mercury emissions standard that is measured in lbs/GWh. Therefore, WPL recommends that the fuel sampling and mercury analysis requirements be eliminated when this compliance approach is selected.

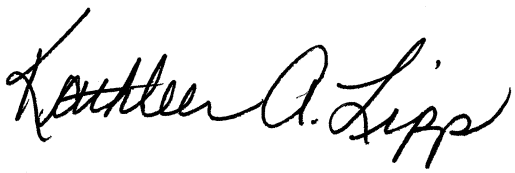
Eliminate Mercury Fuel Sampling/Analysis for Renewable Fuels – Mercury content, while potentially existing in renewable fuels such as wood, corn stover and switchgrass, is significantly less than bituminous coal. Therefore, it is not necessary for EGUs that burn blends to complete extensive mercury content sampling for each type of renewable fuel utilized and at the same frequency as required for coal. Streamlining the proposed

requirements relative to mercury sampling and analysis from renewable fuels supports Wisconsin's ongoing efforts to reduce greenhouse gas emissions. Therefore, WPL recommends that the proposed rules exclude renewable fuels from mercury content requirements, similar to that for natural gas and fuel oil, referenced in the revisions at 446.04(1)(c)1.

Provide Ability to Revise Emission Limitation Election - The proposed rules at NR446.17(2) require that an emission limitation election must be made for coal-fired EGUs "within 24-months of the effective date of this subchapter". These designations would then be used by the Department to establish permanent emission limitation requirements. Given the uncertainties of mercury control technology performance, WPL believes that the 24-month window in this provision is too short to make this significant of an emissions planning decision. WPL requests that the proposed rule revision extend the decision timeframe to 48-months or alternately, provide the ability for a utility to request revision of the election at any point as determined necessary.

WPL welcomes further discussion with the WDNR regarding our public comment submittal.

Sincerely,



Kathleen A. Lipp
Chief Environmental Officer

cc: Al Shea - WDNR
Barb Swan - WPL
Ken Wilmot - WPL